AGC/WSDOT Structures Team Meeting

March 7, 2003 9:00 AM –12:00 PM NWR Corson Avenue Facility

Attendees:	Company	Phone	E-mail
Barney Millard	Concrete Tech.	253-383-3545	mbarney@concretetech.com
Casey Daniel	KLM	253-297-2750	Dcasey@klmci.com
Foster Marco	WSDOT	360-428-1593	fosterm@wsdot.wa.gov
Kapur Jugesh	WSDOT	360-705-7209	kapurju@wsdot.wa.gov
Leachman Dan	Kiewit Const.	360-705-7217	dleachman@kiewit-pbd.com
Lewis Ron	WSDOT	360-705-7827	LewisR@wsdot.wa.gov
Madden Tom	WSDOT	206-768-5861	maddent@wsdot.wa.gov
McCoy Charlie	Atkinson Const.	425-255-7551	cmcco@Atkn.com
Olsen Karsten	Max J. Kuney	509-535-0651	karsten@maxkuney.com
Sheikhizadeh M.	WSDOT	360-705-7828	sheikhm@wsdot.wa.gov
Smith Doug	Mowat Const.	425-398-0205	dougsmith@mowatco.com

The meeting started at 9:00 AM with review of Feb. 7, 2003 minutes.

Dan wanted corrections to the Feb. 7 notes concerning the Standard Specs 6-01.6. He had questioned the need for release of the deck overhang brackets before the barrier is constructed. Ron responded that the overhang brackets are not considered to be falsework.

Action Item: Ron and Mo will initiate the necessary corrections to make this clearer in the Specs.

Review of The Standard Specifications 6-02.1:

6-02.1 – Ron has communicated to the design staff to only refer to the concrete letter designations in the Standard Specs. All other concrete designations, should use a word description such as Lightweight Concrete instead of 4000LW, and should be fully addressed in the Specials. Charlie agreed that this idea would highlight the non-standard concrete mixes early in the contract for the contractors and suppliers to note.

Dan asked if achieving the air content has been a problem. Team members responded that it has not been.

Karston asked why fly ash was a requirement for concrete classes "P" and "D". Ron responded that use of fly ash reduces segregation for the class "P" during placement and increases permeability for the class "D" deck mix. Also, fly ash improves finishing when class 1 or 2 sand is used in the mix. Ron is currently looking at possibly developing a new mix for large diameter shafts.

6-02.5(6) - Charlie asked if pump operator certification was still an issue. The requirements of this Spec are self-defeating since equipment providers also certify their pump operators. Marco mentioned that the inspectors were not actively enforcing this Spec.

Action Item: Ron will evaluate the need for pumper certification

6-02.5(L) - Dan asked why use \$300/cy in lieu of the actual concrete cost for determination of penalty.

Action Item: Ron will investigate

6-02.3(6)A, Cold Weather Protection – Issues such as whether the min. 50 F is required during the curing period or are insulating blankets considered to be full closure need to be addressed.

The team members will review the latest amendments to these Specs for the next meeting and recommend revisions.

6-02.4 – Charlie mentioned that section 6-02.4, seal measurement and payment, has contradictory language with regards to measurement.

Action Item: Ron will review

The team members will review the Standard Specs 6-02.3(10) through 6-02.3(15) for the next meeting

Review of The Feb. Action Items:

6-01.2- Ron is still investigating possible deletion of this Spec.

6-01.14 – It was decided not to delete the galvanized nails in this spec due to rusting and staining concern to concrete.

Girder Stop Details - Jugesh presented the latest girder stop details to the group for feedback. He mentioned that a gap between the stop and girders was necessary to accommodate temperature fluctuations for wide bridges. Gaps can be formed with Masonite. The elastomeric pad connection to the girder stops may be accomplished with rubber cement (some concerns expressed with its durability) or bolted connection.

Item #10 "allowing for adequate depth for falsework beams over roadways" – Mo presented the proposed design criteria to the team. The team members asked for additional 6" for segmental falsework release and recommended ¾" plywood in lieu of

½". This recommendation will be submitted to the Bridge Design Office to be added to the Bridge Design Manual as follows:

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Design Guides For Falsework Depth Requirements

Bridge designers should evaluate falsework depth requirements for the t-beams and cast in place concrete boxes based on the following guidelines:

Falsework Spans < 36' And No Skews

No design is necessary. Provide for a minimum falsework depth of 4'-0" to accommodate:

W36X rolled beams
3/4" camber strip
5/8" plywood
4X4 joists
6" segmental falsework release

Falsework Spans > 36' or Spans With Skews

Designers must design for beam sizes necessary based on design guides in the Standard Specifications 6-02.3(17). Beams must be designed parallel to the longitudinal axis of the bridge. Details of the beam sizes will be shown in the plans with the contractor having the option of alternate designs.

Widenings

For widenings where the available depth for the falsework is fixed, designers must design shallower and heavier steel beams to fit the available depth. Again, beam size details should be shown on the plans with the contractor having the option of alternate designs.

Item #11 – "Liability of uninsured third party damage" –

Karsten passed out a copy of the general liability policy the contractors are to secure. He mentioned that one million Dollars liability insurance no longer is adequate and perhaps should be increased to \$10 million. He questioned why the contractors should insure the State. The State should assume any third party damage liabilities.

Action Item: <u>Karsten will draft a letter regarding this issue to be submitted to the Admin Team.</u>

Item #13 – "Easier traffic barrier construction schemes (precast options) with prefabricated rebar cages"

Action Item: Dan will research this issue for the next meeting

The meeting adjourned at 12:00 PM.

Next Meeting April 11, 2003, 9:00 AM Corson Ave. Facility